### Regional HIV/AIDS Epidemiologic Profile of Springfield, Massachusetts: 2011

#### Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed while residing in another state before being reported in Massachusetts. As of January 1, 2011, this resulted in the removal of 2,297 HIV/AIDS cases, of which 739 have died and 1,558 were living. These persons living with HIV/AIDS may currently reside and receive care in the Commonwealth. The total number of persons living in Massachusetts with HIV/AIDS, irrespective of location of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS surveillance system. The cases are assigned to the state that reports the earliest date of AIDS diagnosis, if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the Massachusetts Department of Public Health (MDPH) HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males: those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 41% of recent HIV diagnoses among females are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

Table 1. To	al number of people reported with HIV infection or AIDS	1
by mortality	status on December 31, 2010 Springfield, Massachuset	ts <sup>2</sup>

by mortality status on Docombol of, 2010 opin	ingilora, mae	<u> </u>
	N	%
People Living with HIV/AIDS	1,026	56%
People Reported with HIV or AIDS who are Deceased	802	44%
Total Number of People Reported with HIV Infection or AIDS	1,828	100%

<sup>&</sup>lt;sup>1</sup> Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999
<sup>2</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

# Table 2. Average annual rate of HIV infection diagnosis from 2007 to 2009 and HIV/AIDS prevalence rate on 12/31/10<sup>1</sup>: Springfield, Massachusetts<sup>2</sup>

Average annual HIV diagnosis rate from 2007–2009	Average rate per 100,000	Average annual number of HIV diagnoses
Springfield, MA	16.2	25.3
Massachusetts Total	9.4	607.3

HIV/AIDS prevalence rate on 12/31/10	Rate per 100,000	Number of people living with HIV/AIDS
Springfield, MA	656.2	1,026
Massachusetts Total	273.7	17,621

<sup>&</sup>lt;sup>1</sup> The denominators for prevalence calculations are based on year 2005 population estimates from the MDPH Bureau of Health Statistics, Research and Evaluation.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

<sup>&</sup>lt;sup>2</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 3. People living with HIV/AIDS<sup>1</sup>, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year<sup>2</sup>: 2000–2009, Springfield, Massachusetts<sup>3</sup>

Year	HIV/AIDS Prevalence	Diagnosis of HIV Infection		
2000	700	25	60	
2000 2001	780 817	35 27	68 64	
2002	854	27	64	
2003	890	34	70	
2004	933	31	74	
2005	962	23	52	
2006	981	26	45	
2007	990	22	31	
2008	999	17	26	
2009	1,002	16	19	

<sup>&</sup>lt;sup>1</sup> Number of people living with HIV/AIDS on 12/31 of each year

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

<sup>&</sup>lt;sup>2</sup>Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for

the most recently available 10 year period after the implementation of HIV infection reporting in 1999. 
<sup>3</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 4. People diagnosed with HIV infection from 2007–2009<sup>1</sup> and people living with HIV/AIDS on December 31, 2010 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Springfield, Massachusetts<sup>2</sup>

	HIV Infection Dia	agnoses	PLWH/A			
Gender:	N	%	N	%		
Male	55	72%	607	59%		
Female	21	28%	419	41%		
Place of Birth:	N	%	N	%		
US	49	64%	693	68%		
Puerto Rico/US Dependency <sup>3</sup>	18	24%	278	27%		
Non-US	9	12%	55	5%		
Race/Ethnicity:	N	%	N	%		
White (non-Hispanic)	10	13%	166	16%		
Black (non-Hispanic)	24	32%	284	28%		
Hispanic/Latino	39	51%	566	55%		
Other/Undetermined <sup>4</sup>	3	4%	10	1%		
Exposure Mode:	N	%	N	%		
Male-to-male sex (MSM)	26	34%	191	19%		
Injection Drug Use (IDU)	12 <sup>7</sup>	16%	337	33%		
MSM/IDU		7	32	3%		
Heterosexual Sex	8 <sup>7</sup>	11%	197	19%		
Other	<del></del>	'	33	3%		
Total Undetermined	29	38%	236	23%		
<ul> <li>Presumed Heterosexual Sex<sup>5</sup></li> <li>Undetermined<sup>6</sup></li> </ul>	10 19	13% 25%	110 126	11% 12%		
Age:	N	%	N	%		
7 tg c.				nber 31, 2010		
Under 13	At Diagnosi	<sup>7</sup>	6	1%		
13 to 19	<b></b> <sup>7</sup>	7	14	1%		
20 to 24	7	7	24	2%		
25 to 29	16	21%	31	3%		
30 to 34	8	11%	62	6%		
35 to 39	9	12%	113	11%		
40 to 44	6	8%	177	17%		
45 to 49	16	21%	227	22%		
50 to 54	9 <sup>7</sup>	12%	168	16%		
55 to 59		<b></b> <sup>7</sup>	122	12%		
60+	<b></b> <sup>7</sup>	7	82	8%		
Total	76	100%	1,026	100%		

<sup>1</sup>Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>2</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>3</sup> Ninety-seven percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 3% were born in an unknown dependency.

Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity
 Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>&</sup>lt;sup>6</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>&</sup>lt;sup>7</sup> Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality. Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/11

Table 5. People living with HIV/AIDS on December 31, 2010 by gender and race/ethnicity: Springfield, Massachusetts<sup>1</sup>

	Male		Female	<b>e</b>
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	124	20%	42	10%
Black (non-Hispanic)	156	26%	128	31%
Hispanic/Latino	321	53%	245	58%
Other/Undetermined <sup>2</sup>	6	1%	4	1%
Total	607	100%	419	100%

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

## Table 6. People living with HIV/AIDS on December 31, 2010 by gender and exposure mode: Springfield, Massachusetts<sup>1</sup>

	Male		Female	е
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	191	31%	N/A	N/A
Injection drug use (IDU)	223	37%	114	27%
MSM/IDU	32	5%	N/A	N/A
Heterosexual sex	47	8%	150	36%
Other	18	3%	15	4%
Total Undetermined	96	16%	140	33%
<ul> <li>Presumed heterosexual sex<sup>2</sup></li> </ul>	N/A	N/A	110	26%
<ul> <li>Undetermined<sup>3</sup></li> </ul>	96	16%	30	7%
Total	607	100%	419	100%

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

<sup>&</sup>lt;sup>2</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>&</sup>lt;sup>3</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up. N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Springfield, Massachusetts<sup>1</sup>, 2000–2009<sup>2</sup>

	Male		Female		
	N	%	N	%	Total
2000	45	66%	23	34%	68
2001	42	66%	22	34%	64
2002	40	63%	24	38%	64
2003	41	59%	29	41%	70
2004	39	53%	35	47%	74
2005	34	65%	18	35%	52
2006	26	58%	19	42%	45
2007	24	77%	7	23%	31
2008	16	62%	10	38%	26
2009	15	79%	4	21%	19

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Springfield, Massachusetts<sup>1</sup>, 2000–2009<sup>2</sup>

	White	NH	Black NH		ack NH Hispanic/Latino			Other/ Undetermined <sup>3</sup>		
	N	%	N	%	N	%	N	%		
2000	8	12%	24	35%	36	53%	0	0%	68	
2001	13	20%	16	25%	35	55%	0	0%	64	
2002	14	22%	18	28%	32	50%	0	0%	64	
2003	14	20%	19	27%	36	51%	1	1%	70	
2004	9	12%	25	34%	39	53%	1	1%	74	
2005	4	8%	20	38%	25	48%	3	6%	52	
2006	5	11%	10	22%	30	67%	0	0%	45	
2007	6	19%	7	23%	18	58%	0	0%	31	
2008	3	12%	9	35%	13	50%	1	4%	26	
2009	1	5%	8	42%	8	42%	2	11%	19	

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity. NH = Non-Hispanic

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Springfield, Massachusetts<sup>1</sup>, 2000–2009<sup>2</sup>

	US		Puerto R US Depend		Non-U	S	
	N	%	N	%	N	%	Total
2000 2001	53 44	78% 69%	<sup>4</sup> <sup>4</sup>	<sup>4</sup> <sup>4</sup>	<sup>4</sup> <sup>4</sup>	<sup>4</sup> <sup>4</sup>	68 64
2002 2003 2004 2005 2006 2007 2008	43 49 44 31 28 19 16	67% 70% 59% 60% 62% 61% 62%	16 16 20 16 <sup>4</sup> <sup>4</sup>	25% 23% 27% 31% <sup>4</sup> <sup>4</sup>	5 5 10 5 <sup>4</sup> <sup>4</sup>	8% 7% 14% 10% <sup>4</sup>	64 70 74 52 45 31 26
2009	14	74%	<sup>4</sup>	4	4	<sup>4</sup>	19

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

## Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Springfield, Massachusetts<sup>1</sup>, 2000–2009<sup>2</sup>

	MS	M	ID	U	MS ID		HT	SX	Oth	ner	Pre HTS			eter- ned <sup>4</sup>	Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2000	9	13%	25	37%	5	7%	13	19%	5	5	5	5	11	16%	68
2001	16	25%	24	38%	5	5	9	14%	<b></b> 5	<b></b> 5	5	8%	9	14%	64
2002	10	16%	21	33%	<b></b> 5	<u></u> 5	14	22%	<u></u> 5	<b></b> 5	9	14%	7	11%	64
2003	15	21%	20	29%	5	<b></b> 5	12	17%	<b></b> 5	<b></b> 5	16	23%	6	9%	70
2004	10	14%	18	24%	<b></b> <sup>5</sup>	<b></b> <sup>5</sup>	16	22%	<b></b> 5	<b></b> <sup>5</sup>	10	14%	17	23%	74
2005	13	25%	14	27%	0	0%	5	<b></b> <sup>5</sup>	<b></b> 5	<b></b> 5	7	13%	14	27%	52
2006	13	29%	12	27%	0	0%	6	13%	0	0%	8	18%	6	13%	45
2007	7	23%	7	23%	0	0%	5	<b></b> <sup>5</sup>	0	0%	<b></b> <sup>5</sup>	5	10	32%	31
2008	11	42%	<b></b> <sup>5</sup>	<b></b> <sup>5</sup>	0	0%	5	<b></b> <sup>5</sup>	<b></b> 5	<b></b> <sup>5</sup>	5	19%	<b></b> 5	<b></b> <sup>5</sup>	26
2009	8	42%	<b></b> <sup>5</sup>	<b></b> <sup>5</sup>	0	0%	<b></b> <sup>5</sup>	<b></b> <sup>5</sup>	0	0%	<b></b> 5	<b></b> 5	7	37%	19

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> Ninety-seven percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 3% were born in an unknown dependency.

<sup>&</sup>lt;sup>4</sup> Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality. Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Massachusetts.

Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>&</sup>lt;sup>4</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>&</sup>lt;sup>5</sup> Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres.

HTSX = Presumed Heterosexual Sex

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Springfield, Massachusetts<sup>1</sup>, 2000–2009<sup>2</sup>

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2000	22	68	32%
2001	18	64	28%
2002	16	64	25%
2003	20	70	29%
2004	20	74	27%
2005	19	52	37%
2006	9	45	20%
2007	10	31	32%
2008	5	26	19%
2009	5	19	26%

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

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<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999. Data Source: MDPH HIV/AIDS Surveillance Program, data as of 1/1/11

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Springfield, Massachusetts, 2007–2009<sup>2</sup>

	HIV and AIDS diagnosed within two	All HIV infection	% diagnosed with HIV and AIDS within two
	months	diagnoses	months
Gender:	N	N	%
Male	17	55	31%
Female	3	21	14%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	5	5	5
Black (non-Hispanic)	6	24	25%
Hispanic/Latino			26%
Other/Undetermined <sup>3</sup>	10 <sup>5</sup>	39 <sup>5</sup>	<sup>5</sup>
Guiei, Gridetermined			
Place of Birth:	N	N	%
US Puerto Rico/US Dependencies⁴ Non-US	12 <sup>5</sup> <sup>5</sup>	49 <sup>5</sup> <sup>5</sup>	24% <sup>5</sup> <sup>5</sup>
Total	20	76	26%

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999. <sup>3</sup> Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified

<sup>\*</sup>Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

Ninety-nine percent of people diagnosed with HIV infection from 2007–2009 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands and <1% were born in Guam.</li>
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